DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019629 Address: 333 Burma Road **Date Inspected:** 27-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr.SHAU JIAN YUAN **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG** Segment

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna was present during the times noted above for observations relative to the work being performed.

This QA inspector observed the following;

1. INPROCESS:

Bay - 14

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the deck panel diaphragm to deck panel longitudinal diaphragm weld joint located on 13BW at Panel Point (PP-123). The weld is designated as DP3148-001-247. The welder is identified as 037840. ZPMC QC Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2213-TC-U4b-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the deck panel diaphragm to deck panel longitudinal diaphragm weld joint located on 14W. The weld is designated as DP3171-001-189. The welder is identified as 069493. ABF QA Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2213-TC-U4b-FCM-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Partial Joint Penetration (PJP) welds joining the deck panel to deck panel longitudinal diaphragm weld joint located on 14W. The weld is designated as DP3171-001-022. The welder is identified as 066236. ABF QA Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2232-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the floor beam plate to bottom plate weld joint located on 14W. The weld is designated as SEG3020E-056. The welder is identified as 066398. ZPMC QC Mr. QIU WEN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2734 R1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Partial Joint Penetration (PJP) welds joining the deck panel to deck panel longitudinal diaphragm weld joint located on 14W. The weld is designated as DP3171-001-021. The welder is identified as 067520. ABF QA Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2232-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the floor beam plate to bottom plate weld joint located on 14W. The weld is designated as SEG3020D-052. The welder is identified as 066038. ZPMC QC Mr. QIU WEN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2734 R1.

ZPMC personnel performing Air Carbon Arc Gouging (ACAG) for back gouging of Complete Joint Penetration (CJP) welds joining the deck panel diaphragm to floor beam weld joint located on 13BW at Panel Point (PP-121) East side. The weld is designated as SEG3014F-005. After back gouging linear longitudinal crack found by Visual Testing & measured 450mm, 75mm & 150mm in length on three location of gouged area. The information passed over the ABF QA Mr. SHEN JIAN for to perform the magnetic particle testing after grind the full length of weld & repair the weld. Further weld detail mention in attached picture.

2. NDT:

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 08299.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The members are identified as butt joint located on 13AW. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were SEG3020AW-085 & SEG3013*-003.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

documents.





Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer